



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/607,678	06/30/2000	Curtis A. Vock	388051	1240

7590 10/16/2003

Curtis A. Vock, Esq.
Lathrop & Gage, L.C.
Suite 302
4845 Pearl East Circle
Boulder, CO 80301

EXAMINER

CHARIOUI, MOHAMED

ART UNIT	PAPER NUMBER
----------	--------------

2857

DATE MAILED: 10/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/607,678	Applicant(s) CURTIS A. VOCK ET AL.	
	Examiner Mohamed Charioui	Art Unit 2857	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 21 and 26-28 are rejected under 35 U.S.C. 102(e) as being anticipated by Root et al.

As per claims 21 and 28, Root et al. teach a base station for displaying at least one performance metric (see Abstract; col. 4, lines 4-26; and col. 4, lines 49-59); one or more mobile sensing units for attachment with participants in a competitive event (see col. 5, lines 35-50 and col. 8, line 66 to col. 9, line 9); and at least one relay unit for receiving data representing the at least one performance metric from the sensing units and for transmitting the received data to the base station (see col. 3, lines 8-11; col. 6, lines 12-16; col. 9, lines 5-9; col. 2, lines 3-13; and col. 2, lines 30-40).

As per claim 26, Root et al. further teach that the base station at least one performance metric on the scoreboard (see col. 4, lines 4-15).

As per claim 27, Root et al. further a display device electrically coupled to the base station, and wherein the base station displays the at least one performance metric on the display device (see col. 4, lines 4-15 and col. 4, lines 54-59).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Root et al. in view of Helmsderfer and Geiger.

Root et al. teach the system as stated above except that the event system comprises at least one camera for capturing at least one image.

Helmsderfer teaches this feature (see col. 8, lines 17-24 and col. 10, lines 1-10). It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate Helmsderfer's teaching into Root et al.'s invention because it would records the sporting activity from the view of the participant; therefore, these images would show the conditions experienced by the participant in the competition.

Root et al., as modified above, do not teach sending data representing at least one image to the base station.

Geiger teaches this feature (see Abstract and col.12, lines 32-53). It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate Geiger's teaching into Root et al. in view of Helmsderfer teachings, because it would transmit images to the remote location (i.e. base station); therefore,

the images of the participant would be broadcasted in real time to view the activities as he experiences them.

3. **Claims 23 and 24** are rejected under 35 U.S.C. 103(a) as being unpatentable over Root et al. in view of Hanchett.

As per claims 23 and 24, Root et al. teaches a relay unit for receiving representing the at least one performance metric from a sensing unit and for transmitting the received data to the base station (see col. 2, lines 60-62, col. 3, lines 8-11; and col. 9, lines 5-9).

Root et al. fails to teach that one relay unit includes at least two relay units. Hanchett teaches this feature (see col. 8, lines 1-33). It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate Hanchett's teaching into Root et al.'s invention because each relay unit has a different transmission frequency that would receive performance data and images from a specific participant and transmit these performance data and images to a specific destination for viewing and analysis.

4. **Claims 29-34** are rejected under 35 U.S.C. 103(a) as being unpatentable over Root et al. and Mickelson.

As per claims 29 and 30, Root et al. teach the system as stated above except that the performance metric includes a rotation rate or total rotation. Mickelson teaches this feature (see col. 2, lines 35-50; col. 3, lines 35-45; and col. 3, line 58 to col. 4, line 5). It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate Mickelson's teaching into Root et al.'s, because it

Art Unit: 2857

would provide a determination of the rotation rate by the angular sensor which would transmit it to the antenna relay and therefore from the antenna relay it would be transmitted to the remote location for viewing and analysis; therefore, viewers would determine how participants are performing.

As per claims 31-34, Root et al. teach the system as stated above except that the sensing unit includes at least one magnetic field sensing device. Mickelson teaches a magnetic field sensing device (see col. 2, lines 36-50 and col. 3, line 58 to col. 4, line 5). It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate Mickelson's teaching into Root et al.'s, because the magnetic field sensor would provide an electrical signal that represents the angular orientation of the vehicle relative to the reference axis, therefore the pitch and the roll angles would be determined in addition to the performance metric parameters of interest to better analyze the participant performance.

5. **Claim 25** is rejected under 35 U.S.C. 103(a) as being unpatentable over Root et al. in view of Hanchett and Eden et al.

Root et al. teach the system as stated above except that the even area is a half pipe event area. Eden et al. teach a half pipe event area (see col. 2, lines 23-46). It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate Mickelson's teaching into Root et al., because it would allow the camera to capture pictures of the entire area; therefore, viewers would be able to see the entire action and the performance of the participants.

Response to Arguments

6. Regarding claims 21 and 26-28, Applicant that Examiner admits that Root does not teach or suggest any relay units, where Applicant refers to page 3 of the office action.

Examiner disagrees with the Applicant, because on page 3 of the office action relay units were not discussed. Relay units are claimed in claims 23 and 24, which are rejected under 35 USC § 103, by the Examiner on page 4 of the office action.

Regarding claims 21 and 26-28, Root clearly teach a relay unit attached to the participant (see col. 1, lines 59-67 and col. 9, lines 5-9). Root teaches receiving and transmitting participants performance data to an Internet web-site (see col. 2, lines 30-40).

Regarding claims 23-24, Applicant argues that Hanchett is a non-analogous art to Root.

Examiner disagrees with the Applicant, because both Root and Hanchett teach relay unit. Hanchett teaching is used here, because it teaches that a relay unit could include more than one relay unit in order to transmit both image and performance metric using different frequencies.

Regarding claims 29-34, Applicant argues that Mickelson is a non-analogous art to Root.

Examiner disagrees with the Applicant, because both Root and Mickelson teach sensing elements. In particular, Mickelson teaches magnetic field sensing device for sensing changes in the magnetic flux and, therefore, measuring roll, pitch and yaw

Art Unit: 2857

angles. For this reason Mickelson's teaching is used here, because it would senses measure rotational components which would determine the participant performance.

Regarding claim 25, Applicant argues that Eden is a non-analogous art to Root.

Examiner disagrees with the Applicant, because both Root and Eden teach event areas. In particular, Eden teaches Half pipe event area and that a camera can be placed on the half pipe surface. Therefore, this feature would complete Root's teaching and provide a half pipe area where a camera can be placed to capture pictures of the entire area so that viewers would be able to see the entire action and the performance of the participants.

Contact information

7. Any inquiry concerning this communication from examiner should be directed to Mohamed Charioui whose telephone number is 703 605-4362. The examiner can normally be reached Monday to Friday 9 am to 6 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S. Hoff can be reached at 703 308-1677. The fax phone number for the organization where this application is assigned is 703 305-3431.

Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist whose number is 703 308-0956.

Mohamed Charioui

9/29/03


MARC S. HOFF
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800